

Borrego Springs Pedestrian Area Plan



**Prepared for County of San Diego
Department of Planning and Land Use**

**By RBF Consulting
San Diego, Ca**

April 2010

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TABLE OF CONTENTS

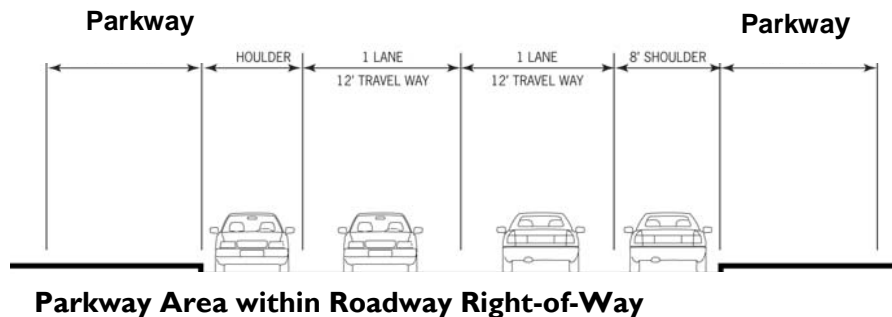
	Page No.
Section I. INTRODUCTION.....	1
Section II. PROJECT PROCESS.....	2
A. Document Organization.....	2
B. Process to Develop Plan.....	3
C. Plan Area Criteria.....	4
D. Field Observation Criteria.....	4
Section III. EXISTING PEDESTRIAN CONDITIONS AND RECOMMENDATIONS	5
A. Pedestrian Area Zones.....	5
B. Zone I -- Pedestrian Needs and Recommended Improvements	7
C. Zone II -- Pedestrian Needs and Recommended Improvements	10
D. Zone III -- Pedestrian Needs and Recommended Improvements	13
Section IV. PRIORITY PROJECTS.....	17

I. INTRODUCTION

The Borrego Springs Pedestrian Area Plan is part of the County of San Diego Pedestrian Master Plan (PMP), a project prepared for the County's Department of Planning and Land Use (DPLU) and funded by a grant from the San Diego Association of Governments (SANDAG).

The PMP's first phase was to prepare a Pedestrian "Toolbox" that contains guidelines and recommended solutions to improve or enhance the pedestrian environment within the public right-of-way. The document supports the objectives of the community development model stated in the County's General Plan, which designates densities, land uses, and roadway classifications based on the characteristics of the area.

The Pedestrian Toolbox focuses primarily on the Parkway section of public streets -- defined as the area between the curb, or edge of travel lane/shoulder, and the property line. It also addresses other roadway components that directly affect the pedestrian environment. Separate Toolbox sections include the Parkway Zone, Walkability, Intersections, and Traffic Calming.



Parkway zone improvements that benefit pedestrians include adequate curb and gutter for the context; street trees or landscaping to buffer pedestrians from adjacent traffic and provide shade; and in some cases, street furniture and public art for comfort and interest.

Walkability improvements are intended to connect various destinations, such as schools, parks, library, and shopping centers, and improve the pedestrian environment. They include clear Americans with Disabilities Act (ADA) routes, curb ramps at intersections, a sidewalk width that is appropriate for the street type, and well-defined pedestrian crossings. Also included are transit stop improvements that make taking transit more comfortable, such as a bench, shade, and shelter; and in appropriate locations, midblock crossings that typically include signage and flashing lights for increased visibility.

Intersection improvements are intended to reduce pedestrian-automobile conflicts, and to improve pedestrian visibility to motorists. Solutions include providing clearly marked crosswalks; reducing pedestrian crossing distances or providing enough time to cross the street; and not allowing "free" right turn movements, where traffic does not stop before turning.

Traffic calming describes physical changes to the roadway that are intended to reduce traffic speeds -- typically done where posted speed limits are low and traffic should move slowly, such as along school routes, residential neighborhoods, or walkable commercial areas with many pedestrians. Examples include raised medians, curb extensions that narrow the road, and traffic circles that make vehicles deviate from a straight line down the road.

The Pedestrian Master Plan's second phase was to prepare pedestrian area plans in five communities and look at the existing pedestrian conditions, identify deficiencies, and recommend solutions from the Pedestrian Toolbox. As more pedestrian area plans are done in additional unincorporated communities, they collectively will form the Pedestrian Master Plan for the County of San Diego.

A well-designed pedestrian environment that is suitable for the intended users is critical to maintain safety and encourage pedestrian activity regardless of the surrounding land uses.

Pedestrians represent a wide range of our population, including children walking to and from school, teens visiting friends, adults on errands, and people who walk for recreation or exercise.



Pedestrians also include people with disabilities using walkers, wheelchairs or other assistance devices as well as transit users who walk between their destinations and transit stops.



II. PROJECT PROCESS

The Borrego Springs Pedestrian Area Plan examined a specific area within the Borrego Springs community to determine existing conditions and identify deficiencies in the pedestrian network and recommend potential improvements. The Borrego Springs Sponsor Group prioritized the potential improvements and cost estimates were prepared for two high priority projects in order to compete for funding at the local, state, and federal level.

A. Document Organization

Section I. Introduction presents the project background.

Section II. Project Process describes the planning process used for the Plan, the criteria to select the study area, and the important factors underlying field observations.

Section III. Existing Pedestrian Conditions and Recommendations is organized by Zone -- a street segment or smaller area within the larger study area. Each Zone includes photographs, a table of specific pedestrian needs and solutions, and a concept map depicting solutions by location.

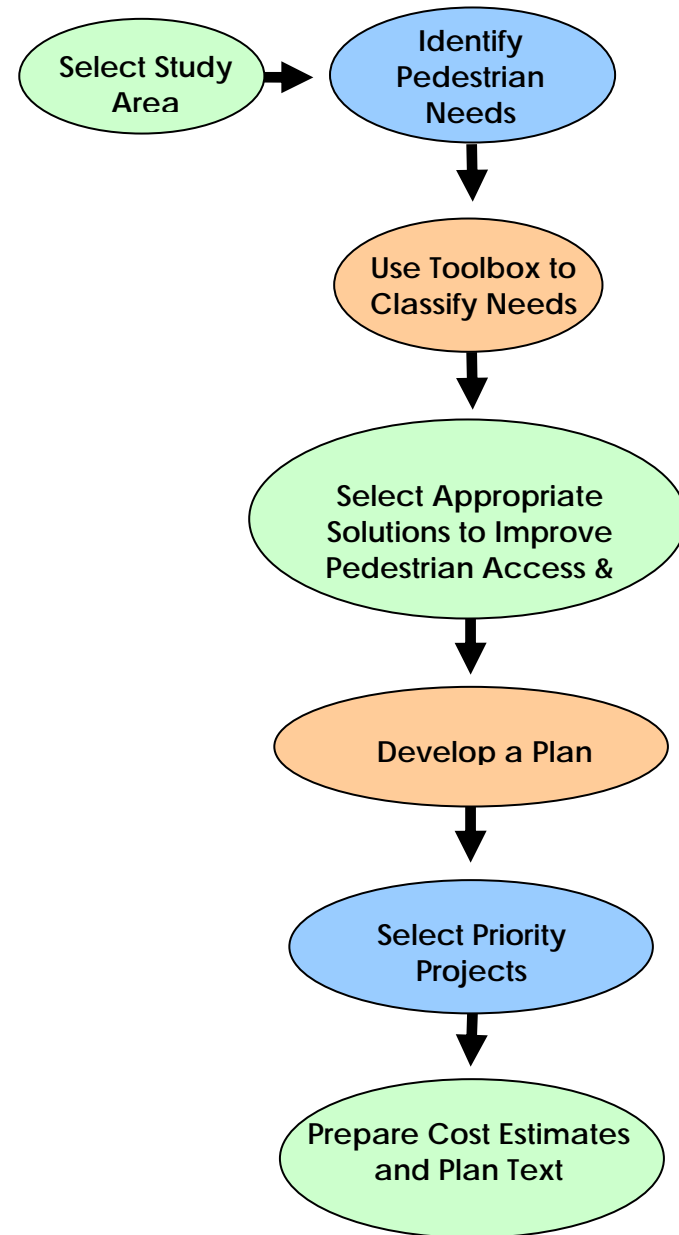
Evaluation of the effects on traffic if a particular solution is implemented is not included at this Pedestrian Area Plan level. At a later stage the effects of certain solutions would need to be studied further by a traffic engineer.

Section IV. Priority Projects includes a project description and cost estimates for two projects derived from the concept maps.

B. Planning Process to Develop Study

The planning process to develop the Borrego Springs Pedestrian Area Plan was a streamlined effort, resulting in a conceptual plan intended to be a starting point for pedestrian improvements and refined over time with more detailed engineering evaluation and design. Planning steps included:

- ♦ **Select Area for Plan** -- Initial contact with the community sponsor group to establish the boundary for the Pedestrian Area Plan.
- ♦ **Identify Pedestrian Needs** -- Distribution of a community input form and consultation with individuals and County Department of Public Works staff for information on existing conditions and planned improvements. Conduct field observations and measurements to identify pedestrian needs and classify needs per the Pedestrian Toolbox.
- ♦ **Select Solutions and Develop a Plan** -- Select appropriate solutions from the Pedestrian Toolbox and map them onto a conceptual plan. Present the findings and recommendations for pedestrian improvements to the community sponsor group.
- ♦ **Select Priority Projects** -- Community sponsor group considers the recommendations and selects priority projects.
- ♦ **Prepare Study and Cost Estimates** -- Prepare the graphics and text for the Pedestrian Area Plan, plus the cost estimates for the two selected priority projects.



C. Plan Area Criteria

The pedestrian area plans are designated for those parts of the community with relatively high pedestrian-oriented land uses, which may include the following:

Civic – Government and public facility buildings such as county offices, libraries, courts, and recreation and community centers with high levels of pedestrian traffic.

Schools – Public and private schools that are major pedestrian destinations during school hours and may also be used after hours for community and recreational purposes.

Commercial – Pedestrian-oriented or accessible commercial districts, blocks, or small nodes, depending on the community's size. These areas either have or are planned to have a higher concentration of commercial uses, such as shopping, convenience services, eating/drinking establishments, or entertainment that generates pedestrian traffic.

Higher Density Residential – This term refers to apartment complexes, condominiums, town homes, or detached single-family homes on relatively small lots. Only higher density residential areas in close proximity to significant commercial areas, civic uses, or transit stops were considered.

Parks and Open Space – Parks and open space areas are important pedestrian activity areas and often include pathways that serve as local pedestrian routes. Only areas in close proximity to the other pedestrian-oriented land uses or transit stops were considered.

D. Field Observation Criteria

The following factors were the basis for conducting field observations.

Connectivity – Allows people to conveniently and safely walk to where they want and need to go, especially between major pedestrian activity centers, for example, a school and park. Every community should have a network of sidewalks that allows continuous safe travel between major pedestrian attractors.

Continuity – Refers to whether sidewalks or walkways already exist, are non-existent, or are discontinuous, and whether people are forced to walk on roadways or parallel informal pathways.

Accessibility and Physical Obstacles – Curb ramps should be provided at crossings for individuals, in compliance with ADA requirements. Walking surfaces should be smooth and cleared of debris. Sidewalks and walkways should not have utility poles, fire hydrants, and other pieces of infrastructure located in the center of the intended walkway. Other obstructions blocking pedestrians may be overgrown vegetation or illegal vehicular parking in the pedestrian way.

Safety – Issues related to pedestrian safety include intersection or street crossings, excessive vehicle speed, inadequate lighting, lack of signage to aid driver awareness of pedestrians, and trip hazards.

Streetscape – Street trees for shade and sidewalk furniture for resting help to create an environment both comfortable and inviting for the pedestrian.

III. EXISTING PEDESTRIAN CONDITIONS AND RECOMMENDATIONS

The unincorporated rural community of Borrego Springs is located approximately 85 miles from San Diego, in the northeast portion of the County. The Borrego Springs study area is characterized by visitor and local-serving commercial uses, with some low-density residential uses. Pedestrian activity is concentrated along Palm Canyon Drive, where two small shopping centers (The Mall and The Center), visitor accommodations, restaurants, a public library, Christmas Circle Park, and several small businesses are located.

The Borrego Springs study area includes Palm Canyon Drive between Stirrup Road and County Club Road. It also includes a route connecting the village core area to the high school along Ocotillo Circle, Saddle Road, Cahuilla Road, and Borrego Springs Road.

The village core has a relatively compact group of uses that are attractive to pedestrians, such as shops, art galleries, and restaurants but the lack of sidewalk connections between uses and the lack of shade and other pedestrian amenities in Borrego Springs' hot climate does not encourage walking during much of the year.

Overall, the pedestrian network within the public right-of-way in the study area is discontinuous. Sidewalks on some streets are intermittent or non-existent, which decreases connectivity for pedestrians. There are very few marked crosswalks, none with highly visible ladder striping, and there is not a continuous pedestrian route connecting the village core area to the high school and middle school.

A. Pedestrian Area Zones

The Borrego Springs Pedestrian Area Plan is divided up into three zones, which are shown on Figure 1.

The following information for each Zone is provided in subsequent pages:

Existing Pedestrian Needs -- A list of general pedestrian needs on major roadways, based on field observations, measurements, and input from the community planning group. Sample photographs are shown of the existing streets and pedestrian conditions. Letters on the map correspond to the photographs.

Pedestrian Needs and Toolbox Matrix -- A table providing details on more specific locations of pedestrian needs; improvement opportunities to address the issue; and classification of the recommended solutions per the County's Pedestrian Toolbox.

Pedestrian Concept Map -- A map with labels shows potential solutions to the pedestrian needs and their general location. The different colors indicate the type of improvement that is recommended from the County's Pedestrian Toolbox – Parkway Zone, Walkability, Intersection, or Traffic Calming.

Zone I – Christmas Circle and Palm Canyon Drive between Stirrup Road and the west side of Christmas Circle.

Zone II – Palm Canyon Drive and Sunset Road between the west side of Christmas Circle and the Ocotillo Circle/Country Club Drive intersection.

Zone III – Ocotillo Circle to Saddle Road; Saddle Road to the High School; Cahuilla Road between Saddle Road and Borrego Springs Road; and Borrego Springs Road from Cahuilla Road to Christmas Circle.

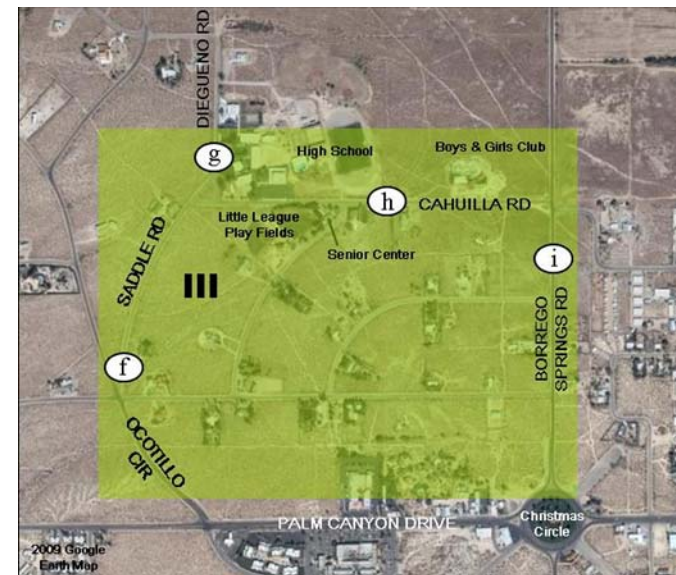
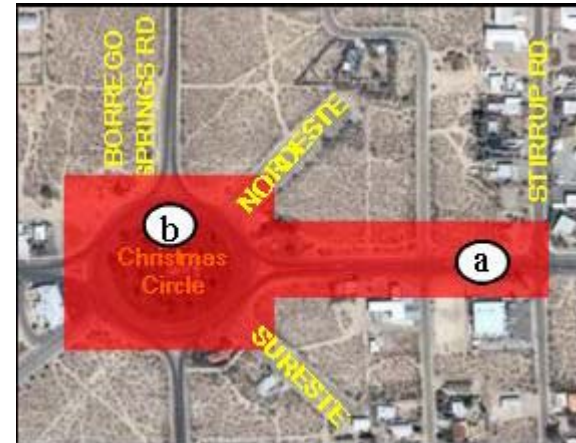


Figure 1 -- Borrego Springs Pedestrian Area Study Zones

B. ZONE I -- PEDESTRIAN NEEDS AND RECOMMENDED IMPROVEMENTS

Existing Pedestrian Needs:

- ♦ Continuous sidewalks
- ♦ Marked crosswalks on cross streets or to Christmas Circle Park
- ♦ Reasonable pedestrian crossing distances across roadways
- ♦ Clearly delineated vehicle travel lanes
- ♦ Appropriate signage informing vehicles of roundabout circulation
- ♦ Shaded walkways
- ♦ Bus stop amenities – shelter, bench



Palm Canyon Dr east of Flying U



Christmas Circle

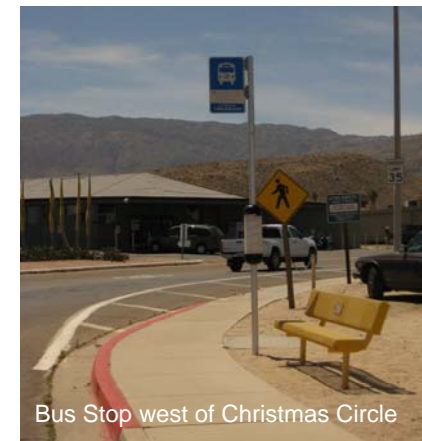


Table 1 PEDESTRIAN NEEDS AND TOOLBOX MATRIX FOR ZONE I -- BORREGO SPRINGS








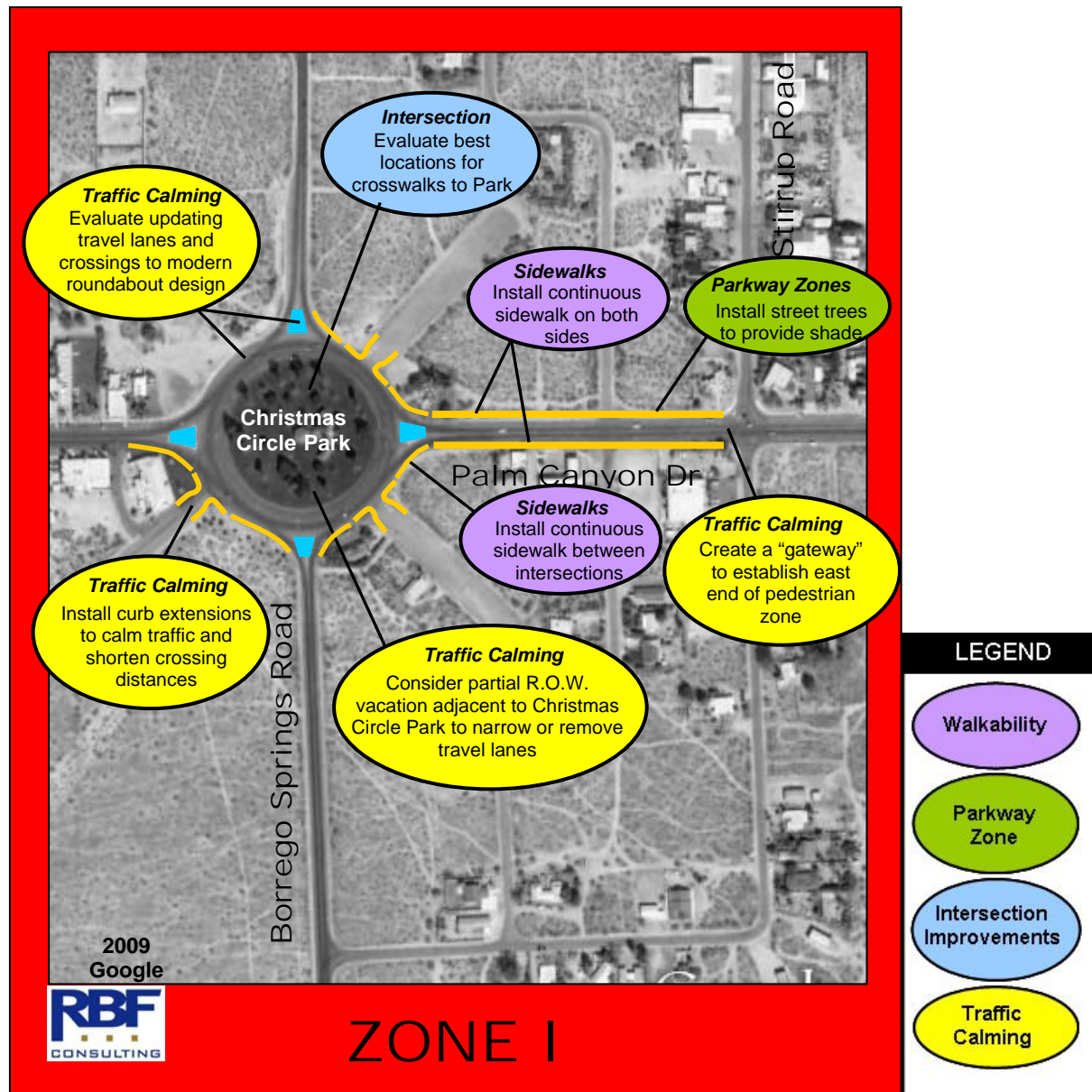
PEDESTRIAN NEEDS AND TOOLBOX MATRIX						
LOCATION	PEDESTRIAN NEEDS	IMPROVEMENT OPPORTUNITIES	TOOLBOX			
			Parkway Zones	Walkability	Traffic Calming	Intersection Improvements
Zone I						
(a) Palm Canyon Drive, between Stirrup Road and Christmas Circle	Continuous sidewalk on north side. New sidewalk on south side. Additional shade on both sides.	Provide continuous sidewalk on both sides of the street. Install street trees for shade. Install a gateway feature at Stirrup Road to establish east end of pedestrian zone and calm traffic.				
(b) Christmas Circle	Continuous sidewalk on outside edge of Christmas Circle. Measures to facilitate pedestrian crossing of overly wide travel lanes that create long crossing distance. Marked crosswalks to Christmas Circle or across intersecting streets. Clearly delineated vehicle travel lanes. Signage informing vehicles of roundabout circulation. Bus stop amenities.	Evaluate configuration provided by Borrego Village Association and any other alternatives with potential to reduce traffic conflicts, reduce the width and/or number of travel lanes, and vacate right-of-way adjacent to Christmas Circle Park to increase park size. Install signage depicting roundabout circulation pattern. Stripe the travel lanes, including the outside edge. Neck down the overly wide side streets intersecting Christmas Circle with curb extensions to shorten pedestrian crossing distances. Provide marked crosswalks to Christmas Circle Park. Provide shade structure and non-metal bench at bus stop.				

Figure 2 ZONE I PEDESTRIAN CONCEPT PLAN -- BORREGO SPRINGS



C. ZONE II -- PEDESTRIAN NEEDS AND RECOMMENDED IMPROVEMENTS

Existing Pedestrian Needs:

- ◆ Continuous sidewalk
- ◆ Reasonable pedestrian crossing distances across roadways
- ◆ Marked crosswalks at intersection
- ◆ Safe pedestrian crossing of Palm Canyon Drive between commercial centers
- ◆ Shaded walkways
- ◆ Appropriate traffic in areas with pedestrian traffic



Table 2 PEDESTRIAN NEEDS AND TOOLBOX MATRIX FOR ZONE II -- BORREGO SPRINGS







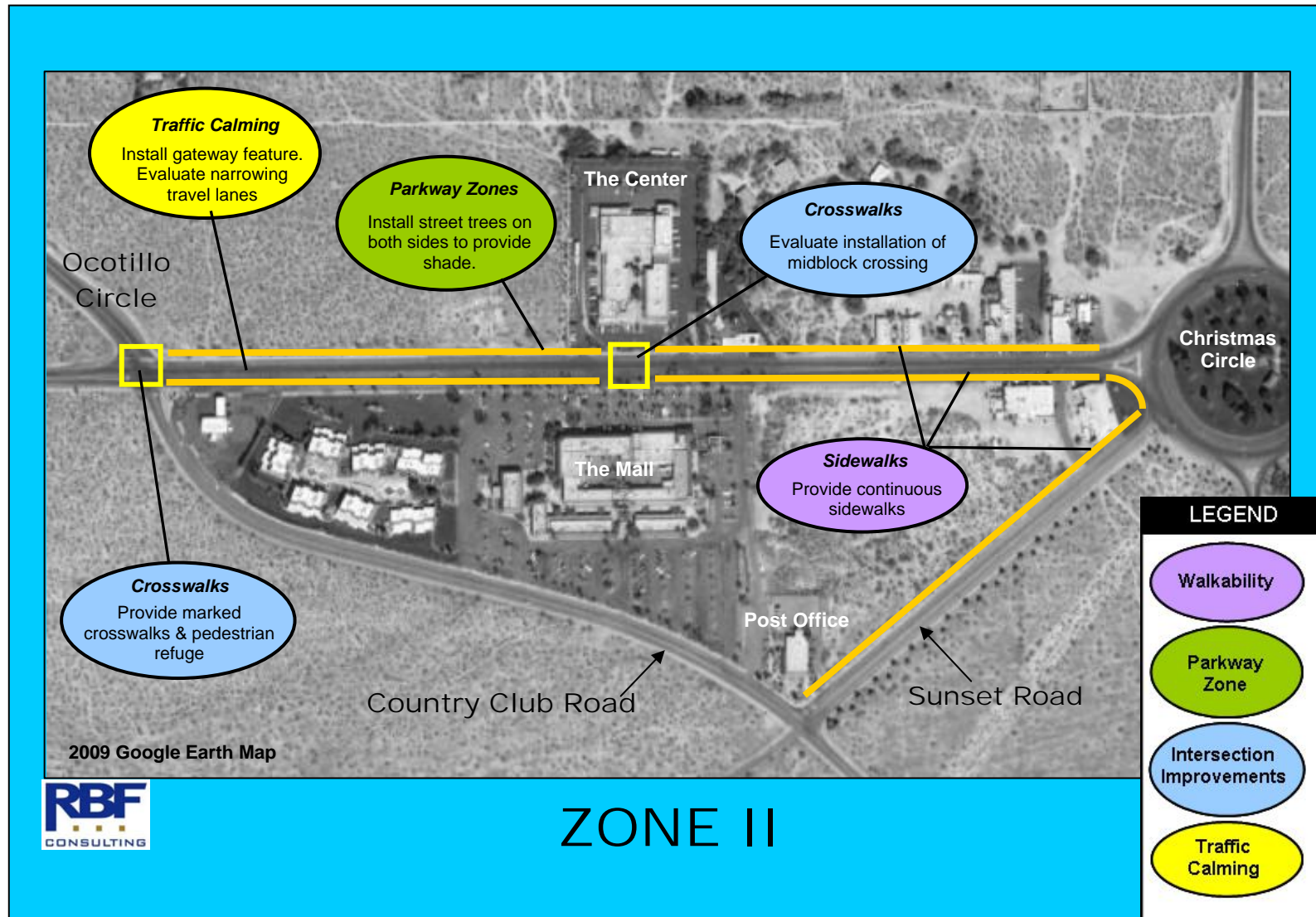
PEDESTRIAN NEEDS AND TOOLBOX MATRIX						
LOCATION	PEDESTRIAN NEEDS	IMPROVEMENT OPPORTUNITIES	TOOLBOX			
			Parkway Zones	Walkability	Traffic Calming	Intersection Improvements
Zone II						
<div>II</div> <div>(c) Palm Canyon Drive, between Country Club Drive and Christmas Circle</div>	Continuous sidewalk on both sides of street. Measures to facilitate pedestrian crossing of overly wide travel lanes that create long crossing distances. Explore the feasibility and provide, if appropriate, midblock crossing along the nearly one-half mile stretch. Additional shade. Speeding vehicles.	Provide continuous sidewalk on both sides of street. Install a gateway feature at west end of Village Core to establish the pedestrian zone and calm traffic. Evaluate narrowing the travel lanes and installing a planting strip for drought-tolerant street trees that provide shade. Evaluate a midblock crossing between the Mall and the Center, with curb extensions and appropriate safety features.				
(d) Intersection of Palm Canyon Drive with Country Club Drive / Ocotillo Circle	Marked crosswalks. Area for pedestrian refuge at free flowing right turn from County Club Rd east onto Palm Canyon Drive.	Install concrete pedestrian refuge and marked crosswalk on Country Club Road.				
(e) Sunset Road, between Christmas Circle and Country Club Drive	Continuous sidewalk on north side of street. New sidewalk on south side of street. Marked crosswalk at intersections. Shaded pedestrian facilities.	Provide continuous sidewalk on north side of street. Stripe the outside line of vehicle travelway. Install drought-tolerant shade trees.				

Figure 3 ZONE II PEDESTRIAN CONCEPT PLAN -- BORREGO SPRINGS



D. ZONE III -- PEDESTRIAN NEEDS AND RECOMMENDED IMPROVEMENTS

Existing Pedestrian Needs:

- ♦ Continuous sidewalk along high school route
- ♦ Marked crosswalks at intersections
- ♦ Safe pedestrian crossing of Palm Canyon Drive between high school and Little League play fields
- ♦ Controlled pedestrian and traffic movements during school drop-off and pick-up hours in the Diegueno Road / Saddle Road / Cahuilla Road area
- ♦ Appropriate striping to delineate bus drop-off/pick-up area

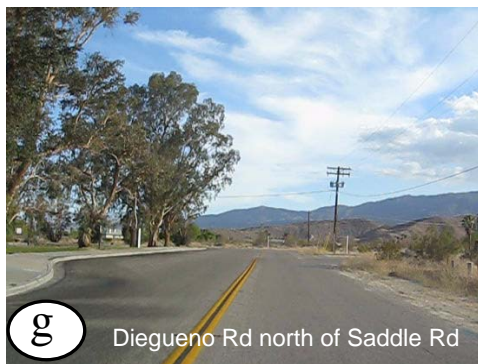


Table 3 PEDESTRIAN NEEDS AND TOOLBOX MATRIX FOR ZONE III -- BORREGO SPRINGS







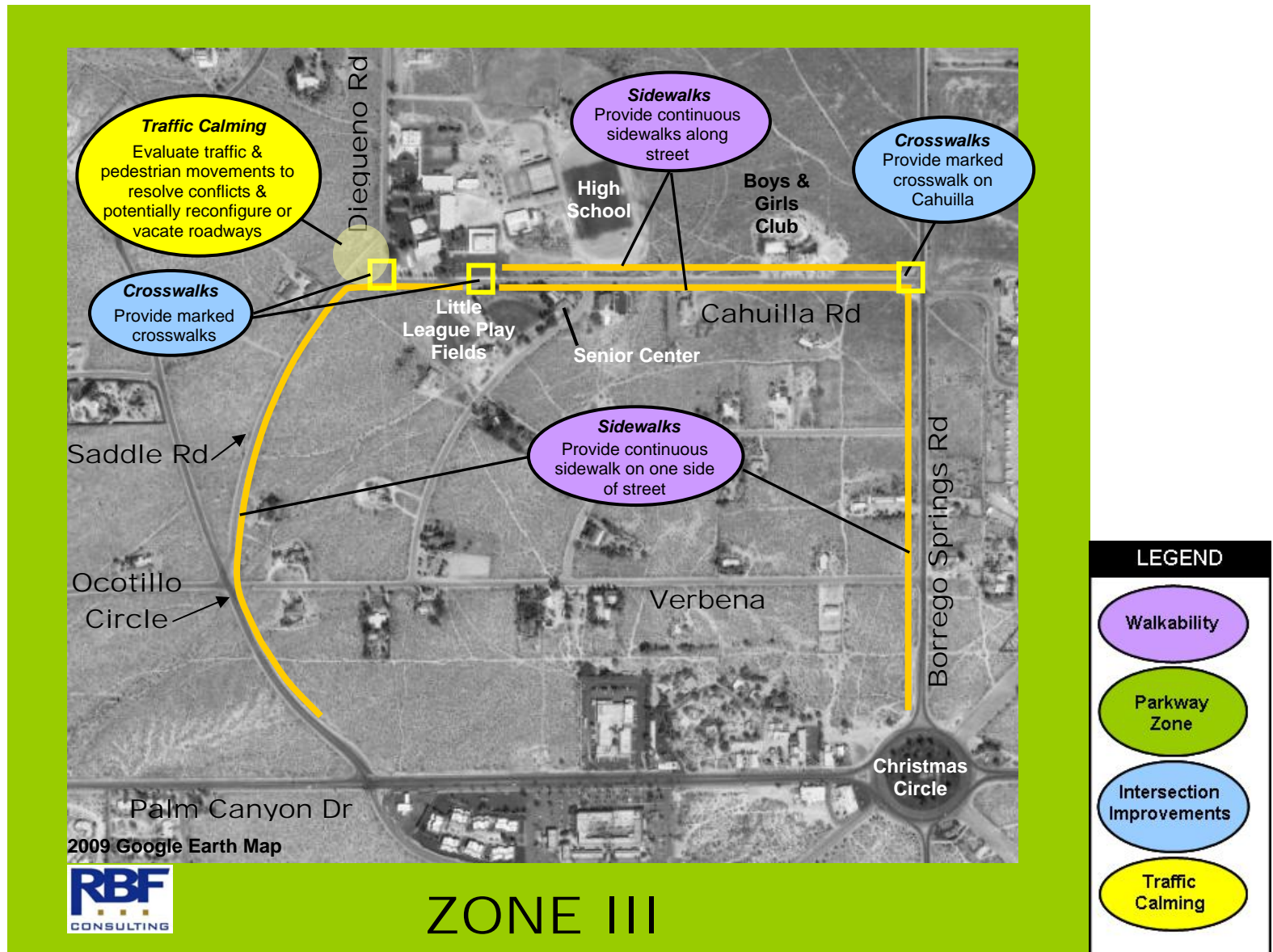
PEDESTRIAN NEEDS AND TOOLBOX MATRIX							
LOCATION	PEDESTRIAN NEEDS	IMPROVEMENT OPPORTUNITIES	TOOLBOX				
			Parkway Zones	Walkability	Traffic Calming	Intersection Improvements	
Zone III							
<div>f</div> Ocotillo Circle, from Palm Canyon Drive to Verbena; and Saddle Road, from Verbena to Diegueno Road	Continuous sidewalk to the high school. Marked crosswalks.	Provide continuous sidewalk on east side of Ocotillo Circle and Saddle Road. Provide marked crosswalk at Verbena.					
<div>g</div> Intersection area of Saddle Road, Cahuilla Road, and Diegueno Road	Resolution of conflicting traffic movements during school drop-off and pickup hours. Need for marked crosswalks. Striping to delineate lanes or bus drop-off / pickup area.	Evaluate traffic movements, roadways, and pedestrian needs to resolve conflicts, increase safety, and simplify traffic flow. Provide marked crosswalks. Stripe travel lanes and delineate bus area.					
<div>h</div> Cahuilla Road, between Saddle Road and Borrego Springs Road	Continuous sidewalk on both sides of street. Marked crosswalks.	Provide continuous sidewalk on both sides of Cahuilla Rd. Provide a marked midblock crosswalk with signage, from the high school to the Little League play fields.					
<div>i</div> Borrego Springs Road, between Cahuilla Road and Christmas Circle	Continuous sidewalk on west side of street; new sidewalk on east side. Marked crosswalks.	Provide continuous sidewalk on west side of Borrego Springs Rd. Provide a marked crosswalk across Cahuilla Rd at Borrego Springs Rd.					

Figure 4

ZONE III PEDESTRIAN CONCEPT PLAN -- BORREGO SPRINGS



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IV. PRIORITY PROJECTS

Although there are no funds associated with this SANDAG-sponsored contract that would cover design or construction costs at this time, having the identified projects available will streamline future opportunities to compete for County, SANDAG, state, and federal funding opportunities.

On Thursday, May 7, 2009, a presentation on the pedestrian needs and recommended improvements was provided to the Borrego Springs Community Sponsor Group (see Section III). The Sponsor Group decided to most closely consider the areas defined in Zones 1 and 3 as both of these Zones are integral to moving pedestrians through the community in a safe and efficient manner. The Sponsor Group felt that the area defined in Zone 2 should be considered in the future after the Borrego Village Association developed its own design guidelines for the Palm Canyon business district. All of the projects listed below were given equal high priority marks from a majority of the Sponsor Group.

The Zone 1 high priorities for the Sponsor Group include:

- ♦ Palm Canyon Drive between Stirrup Road and Christmas Circle – Continuous sidewalk on both sides of the street with ADA curb ramps at intersections and street trees for shade.
- ♦ Christmas Circle – Evaluate configuration provided by Borrego Village Association and any other alternatives with potential to reduce traffic conflicts, reduce the width and or number of travel lanes and vacate right of way adjacent to Christmas Circle Park to increase park size.

The Zone 3 high priorities for the Sponsor Group include:

- ♦ Cahuilla Road, between Saddle Road and Borrego Springs Road – Continuous sidewalk on both sides of Cahuilla Rd. (Sponsor Group position is that one side is adequate) and a marked midblock crosswalk with signage, from the High School to the Little League play fields
- ♦ Borrego Springs Road between Cahuilla Road and Christmas Circle – Continuous sidewalk on both sides of Borrego Springs Road. (Sponsor Group position is that one side is adequate) and marked crosswalk across Cahuilla Road at Borrego Springs Road.

As a result of the Sponsor Group's recommendations, the following two projects from the Pedestrian Concept Plans are selected to be Priority Projects:

- ♦ Sidewalk and Street Tree Installation on Palm Canyon Drive between Stirrup Road and Christmas Circle
- ♦ Sidewalk Installation along a school walking route, including Ocotillo Circle, Saddle Road, Cahuilla Road, and Borrego Springs Road

A project description with preliminary cost estimates has been prepared for these projects, found in the following pages of this document.

The cost estimates are intended to provide a general order of magnitude cost for the purpose of evaluating implementation potential and pursuit of funding sources. Improvement items and quantity takeoffs are based on the conceptual plans provided within this Pedestrian Area Plan and gross measurements done in the field or from aerial mapping.

Since these estimates are preliminary in nature and based on a conceptual plan they shall not be construed to represent actual construction costs. Final quantities and construction costs are subject to change, which would occur following detailed analysis, accurate base maps, preliminary design by a civil engineer, and evaluation of potential impacts to traffic by a traffic engineer. Final engineering design may further change the quantities and construction costs.

Any costs for additional rights of way/easement acquisition, environmental mitigation, final engineering design, engineering survey, and other soft costs/development fees are not included. Drainage facilities for conveyance, detention and water quality control are also not included in these estimates.

Since the preparer of these cost estimates has no control over the cost of labor, materials, equipment, contractors' method of determining unit prices, competitive bidding or market conditions, each cost estimate should be considered an "Opinion of Probable Construction Cost" and is made on the basis of the preparer's experience and represents their best judgment as design professionals familiar with the construction industry. Preparer does not guarantee that proposals, bids, or the actual construction cost will not vary from these cost estimates.

A. PALM CANYON DRIVE PEDESTRIAN IMPROVEMENTS (SEGMENT BETWEEN STIRRUP RD & CHRISTMAS CIRCLE)

Existing Conditions: The project addresses a 750-foot long segment of Palm Canyon Drive between Stirrup Road on the east and Christmas Circle on the west. Palm Canyon Drive has one travel lane in each direction, with wide paved shoulders stenciled for bike lanes and also used by pedestrians. There is no sidewalk except for a short section on the northwest corner of Palm Canyon Drive and Stirrup Road. There are no shade trees or other pedestrian amenities except for a few trees near the southwest corner of Stirrup Road. The lack of continuous sidewalks and lack of shade in Borrego Springs' hot desert climate does not encourage people to walk.



The inadequate separation between vehicular and pedestrian traffic on this segment reduces pedestrian safety under current conditions. This segment generates a number of pedestrians due to its business establishments, such as the hardware store, and other businesses on Stirrup Road. Pedestrians and bicyclists also travel this segment on their way to town or Christmas Circle, coming from the Road Runner Club resort community and a trailer park community a short distance east on Palm Canyon Drive.

Project Description: The project improves safety conditions for pedestrians walking along Palm Canyon Drive and provides shade to enhance the pedestrian environment, encouraging people to walk more.

The project includes continuous sidewalks on both sides of Palm Canyon Drive between Stirrup Road on the east extending westward to Christmas Circle's intersections with Avenue Nordeste and Avenue Sureste, installing a five-foot wide concrete sidewalk, a five-foot wide planting strip, and concrete curb and gutter adjacent to the striped bike lane.

Crosswalks would be located across Flying U Road, both sides of Palm Canyon Drive. Wheelchair ramps for access would be located at the following locations on Palm Canyon Drive: southwest corner of Stirrup Road crossing (1), both Flying U Road crossings (4), the entrance to Wells Fargo Bank parking (2), and sidewalk terminations at Avenue Nordeste (1) and Avenue Sureste (1).

Shade trees (24" box) adapted to desert conditions (high temperatures, drought) and appropriate for street trees would be planted 30 feet on center within the planting strip adjacent to the bike lane, with disintegrated granite as ground cover. Tree guards or staking would keep the trees upright as they become established under Borrego Springs' windy conditions and also protect them from potential vandalism or theft.

[See Table 4: Cost Estimate – Palm Canyon Drive for details.]

Table 4: COST ESTIMATE -- PALM CANYON DRIVE PEDESTRIAN IMPROVEMENTS
For Planning Purposed Only

Item Description	Qty.	Unit	Unit Cost (\$'s)	Amount	Subtotal	Notes & Assumptions ^{1,2}
Palm Canyon Drive between Stirrup Road and Avenues Noreste and Sureste -- 775 LF on north, 905 LF on south						
Pedestrian Infrastructure					\$367,120	
Concrete Sidewalk (5 ft wide)	8,400	SF	\$16.00	\$134,400		
Concrete Curb and Gutter	1,680	LF	\$44.00	\$73,920		
5 ft wide DG Area	7,650	SF	\$16.00	\$122,400		Tree well areas excluded.
Crosswalk Striping	2	EA	\$200.00	\$400		
Wheelchair Ramps (w/ warning surface half domes)	9	EA	\$4,000.00	\$36,000		One direction only, parallel with road, not across it.
Pedestrian Amenities					\$108,100	
24" Box Trees	47	EA	\$500.00	\$23,500		Trees planted 30' on center.
Tree Maintenance (for 60 days)	47	EA	\$400.00	\$18,800		
Irrigation	1,410	LF	\$20.00	\$28,200		
Tree Guards (Powder Coated)	47	EA	\$800.00	\$37,600		
Miscellaneous Improvements					\$28,560	
AC Pavement Removal	1,680	SF	\$7.00	\$11,760		
Sawcut Existing AC	1,680	LF	\$10.00	\$16,800		

1 – Unit Costs based on City of San Diego Unit Price List, January 2009; however, these costs were doubled to reflect previous experience with pedestrian improvement projects.

2 – All items listed include installation costs.

SF = Square Foot

EA = Each

LS = Lump Sum

LF = Linear Foot

Construction Subtotal: \$503,780

25% Contingency **\$125,945**

Total Construction Cost: \$629,725

Mobilization (10%): **\$62,973**

Survey (2%): **\$12,595**

Design (15%): **\$94,459**

Total Cost Estimate for Improvements \$800,000

B. SAFE ROUTE TO SCHOOL (OCOTILLO CIRCLE, SADDLE ROAD, CAHUILLA ROAD & BORREGO SPRINGS ROAD)

Existing Conditions: Borrego Springs High School, Middle School, and other civic facilities located on Cahuilla Road, such as the skate park, Boys and Girls Club, Little League Play Fields, and the Senior Center, are not connected by a continuous sidewalk nor are any of these facilities connected by sidewalk to the Borrego Springs Village area. During the beginning and ending hours of the school day, there are high volumes of traffic along the streets used as the school route, which creates undesirable conditions for pedestrians.

The only existing sidewalk is along the high school frontage and a short segment of Ocotillo Circle. Consequently, children walking to these destinations must walk in the vehicular travel lane, which is not safe, or in the loose sand and gravel adjacent to the travel lane. Walking in these conditions can be uncomfortable and also result in soiled shoes and clothing, especially under wet weather conditions.



There are no marked crosswalks on any of the streets along the school route and there is not a marked midblock crossing between the high school and the Little League play fields. Marked crosswalks are needed to alert drivers where

pedestrians are likely to be crossing and to show pedestrians where they should cross.

Project Description: The project provides a continuous sidewalk for a safe route to schools, from the Village area's east and west ends to the Borrego Springs High School and other civic facilities. It also provides a marked midblock crossing from the high school to the Little League play fields.

The project includes a five-foot wide sidewalk with curb, and gutter on the east side of Ocotillo Circle, from its existing termination up to Saddle Road; then along the east side of Saddle Road to Cahuilla Road; on the south side of Cahuilla Road from Saddle Road to the intersection with the Circle J Drive; on the north side of Cahuilla Road extending from the sidewalk's current termination up to Borrego Springs Road; and along the west side of Borrego Springs Road to Christmas Circle. Marked crosswalks (yellow ladder striping) and access ramps would be located on Ocotillo Circle crossing Verbena, and along Borrego Springs Road's east side where it crosses Cahuilla, Cloudy Moon, and Verbena. Access ramps would also be at the drive into the play fields parking lot. A marked midblock pedestrian crossing with signage to warn motorists would be located between the high school and the playfields at a location to be determined in preliminary engineering. [See Table 5: Cost Estimate – Safe Route to School for details.]

In the preliminary engineering phase of design, alternative materials to the proposed concrete sidewalk, curb, and gutter may be considered; however, concrete has been selected at this time to match existing sidewalks in other parts of town.

Table 5: COST ESTIMATE – SAFE ROUTE TO SCHOOL PEDESTRIAN IMPROVEMENTS

For Planning Purposed Only

Item Description	Qty.	Unit	Unit Cost (\$'s)	Amount	Subtotal	Notes & Assumptions ^{1,2}
Safe Route to School -- Ocotillo Circ 950 LF on east; Saddle Rd 1600 LF on east; Cahuilla Rd 2,045 LF on north, 1,180 LF on south; Borrego Springs Rd 1,735 LF on west						
Pedestrian Infrastructure					\$989,440	
Concrete Sidewalk (5 ft wide)	37,550	SF	\$16.00	\$600,800		
Concrete Curb and Gutter	7,510	LF	\$44.00	\$330,440		
Crosswalk: Striping (Standard)	5	SF	\$300.00	\$1,500		Ladder style striping
Midblock crossing with warning signage for vehicles	1	EA	\$1,500.00	\$1,500		Ladder style striping
Wheelchair Ramps (w/ warning surface half domes)	12	EA	\$4,000.00	\$48,000		One direction only, parallel with road, not across it.
Concrete Driveways	3	EA	\$2,400.00	\$7,200		Based on 20' X 5' concrete driveway. 3 Total driveways.
Miscellaneous Improvements					\$75,100	
Sawcut Existing AC	7,510	LF	\$10.00	\$75,100		

1 – Unit Costs based on City of San Diego Unit Price List, January 2009; however, these costs were doubled to reflect previous experience with pedestrian improvement projects.

2 – All items listed include installation costs.

SF = Square Foot

EA = Each

LS = Lump Sum

LF = Linear Foot

Construction Subtotal: \$1,064,540

25% Contingency **\$266,135**

Total Construction Cost: \$1,330,675

Mobilization (10%): **\$133,068**

Survey (2%): **\$26,614**

Design (15%): **\$199,601**

Total Cost Estimate for Improvements \$1,690,000